

Appl. No. 10/709,320
Amdt. Dated 11/03/2005
Reply to Office action of August 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An interlevel dielectric layer comprising:
a dielectric layer; and
a dielectric film, ~~deposited under compressive stress,~~ disposed atop the dielectric layer;
wherein the dielectric film has similar chemical composition to the dielectric layer, but has different morphology than the dielectric layer.
2. (original) The interlevel dielectric layer, according to claim 1, wherein the dielectric layer comprises a low-k material.
3. (original) The interlevel dielectric layer, according to claim 1, wherein the dielectric layer comprises an organosilicon glass.
4. (original) The interlevel dielectric layer, according to claim 1, wherein the dielectric layer comprises a SiCOH material.
5. (original) The interlevel dielectric layer, according to claim 1, wherein:
the dielectric layer has a thickness of 500 - 20,000 Å; and
the dielectric film has a thickness of 200 - 2000 Å.
6. (original) The interlevel dielectric layer, according to claim 1, wherein:
the dielectric layer has a thickness of 1000 - 15,000 Å; and
the dielectric film has a thickness of 350 - 1000 Å.
7. (original) The interlevel dielectric layer, according to claim 1, wherein the dielectric film has

Appl. No. 10/709,320

Amdt. Dated 11/03/2005

Reply to Office action of August 3, 2005

a thickness which is 2% - 10% of the thickness of the dielectric layer.

8. (original) The interlevel dielectric layer, according to claim 1, wherein the dielectric film has a thickness which is approximately 3% of the thickness of the dielectric layer.

9. (canceled) ~~The interlevel dielectric layer, according to claim 1, wherein the dielectric film has similar chemical composition to the dielectric layer, but has different morphology than the dielectric layer.~~

10. (original) The interlevel dielectric layer, according to claim 1, wherein a dielectric cap is deposited on the dielectric film.

Cancel claims 11-19

Please enter the following —

20. (new) The interlevel dielectric layer, according to claim 1, wherein the dielectric film is denser than the dielectric layer.

21. (new) An interlevel dielectric layer comprising:

a dielectric layer; and

a dielectric film disposed atop the dielectric layer;

wherein:

the dielectric layer has a thickness in the range of from greater than 12000 Å to 20000 Å;

and

the dielectric film has a thickness in the range of from greater than 1000 Å up to 2000 Å.

22. (new) The interlevel dielectric layer, according to claim 21, wherein the dielectric layer comprises a low-k material.

23. (new) The interlevel dielectric layer, according to claim 21, wherein the dielectric layer

Appl. No. 10/709,320
Amdt. Dated 11/03/2005
Reply to Office action of August 3, 2005
comprises an organosilicon glass.

24. (new) The interlevel dielectric layer, according to claim 21, wherein the dielectric layer comprises a SiCOH material.

25. (new) The interlevel dielectric layer, according to claim 21, wherein the dielectric film has similar chemical composition to the dielectric layer, but has different morphology than the dielectric layer.

26. (new) The interlevel dielectric layer, according to claim 21, wherein a dielectric cap is deposited on the dielectric film.

27. (new) The interlevel dielectric layer, according to claim 1, wherein the dielectric film is denser than the dielectric layer.